MISCELLANEOUS.

The Bahama Amphioxus. By E. A. Andrews.

In addition to the Amphioxus, or lancelet, found on the coasts of many parts of Europe, some five others have been reported from various parts of the world. Günther recognizes these six as species of Branchiostoma, that name having been given prior to the term Amphioxus. The chief specific characters that can be made out in the preserved specimens are the relative positions of anus and atriopore as expressed by the number of muscle-segments anterior to, between, and posterior to these openings. In addition to these forms there is an undescribed lancelet in California, which, as far as the above criteria may be trusted, belongs to a distinct species of Branchiostoma, and a Japanese form that may prove to be one of the known species.

The great morphological interest attached to the lancelet as the simplest and, in many respects, the most primitive of known vertebrates makes the taxonomy and geographical distribution of this group of more than common importance, and justifies a short pre-

liminary account of a new form found in the Bahamas.

While the Johns Hopkins Marine Laboratory was stationed at North Bimini, Bahamas, in the summer of 1892, many small lancelets were taken swimming at or near the surface as well as living in the calcareous sand on the flats exposed at low water.

These partly pelagic acraniates differ so much from the known forms that they may be regarded as generically distinct. Their chief

anatomical peculiarities are as follows:-

(1) The gonads are developed only upon the right side of the body, both in the adult and in the young.

(2) The notochord, neural tube, and median fins are prolonged as a considerable caudal process posterior to the myotomes.

(3) The ventral fin is without any fin-rays or successive fin-ray chambers.

- (4) The pre-oral hood is extensive; cirri smooth and united by the hood-membrane for the greater part of their length.
- (5) The right metapleuron is continuous with the median ventral fin, which passes to the right of the anus.

(6) The "olfactory pit" is apparently absent.

(7) Myotomes anterior to atriopore 44, between atriopore and anus 9, posterior to anus 13: total 66. Length 13-16 millim.

(8) Swims free in the evening both at Bimini and in Nassau Harbour. Lives also in the calcareous sand.

An illustrated description of these characters of this new genus of acraniates will appear in a forthcoming number of vol. v. of the 'Studies from the Biological Laboratory.'—Johns Hopkins University Circulars, vol. xii. no. 106, p. 104.